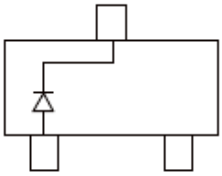
SWITCHING DIODE

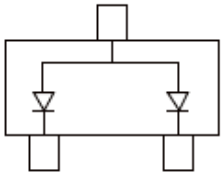
SOT-523

FEATURES

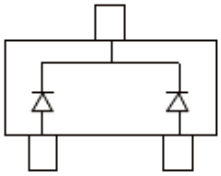
- Low Forward Voltage Drop
- Fast Switching



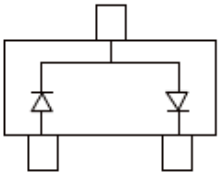
BAT54T Marking: L1



BAT54AT Marking: L2



BAT54CT Marking: L3



BAT54ST Marking: L4

Maximum Ratings @T_A=25℃

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage **DC Blocking Voltage**	V_{RM} V_R	30	V
Average Rectified Output Current	I_O	200	mA
Power Dissipation	Pd	150	mW
Junction temperature	T_J	125	℃
Storage temperature range	T_{STG}	-65-125	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	I_R= 100μA	30		V
Reverse voltage leakage current	I_R	V_R=25V		2	uA
Forward voltage	V_F	I_F=0.1mA I_F=1mA I_F=10mA I_F=30mA I_F=100mA		240 320 400 500 1000	mV
Total capacitance	C_T	V_R=1V,f=1MHz		10	pF
Reverse recovery time	t_{rr}	I_F=I_R=10mA, I_{rr}=0.1xI_R,R_L=100Ω		5	nS

Typical Characteristics

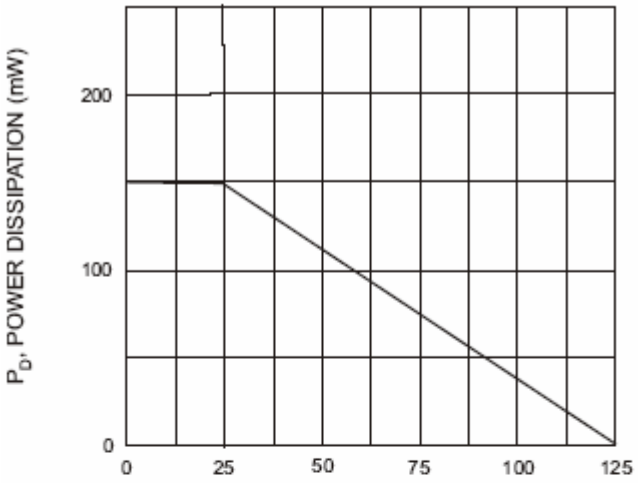


Fig. 1 Power Derating Curve

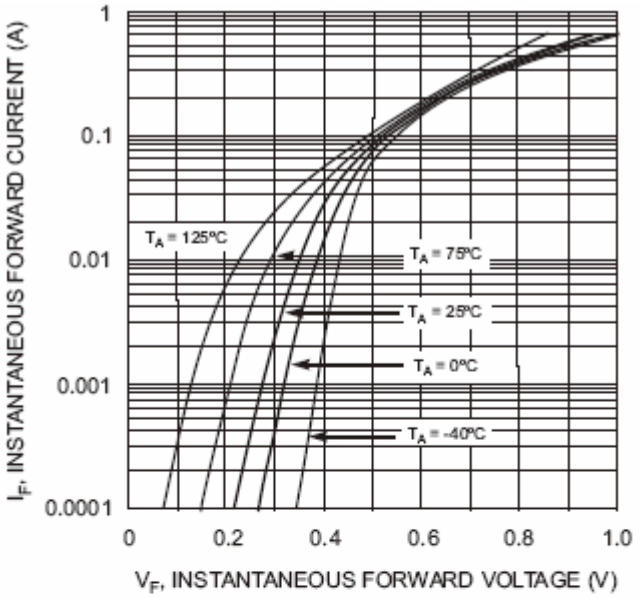


Fig. 2 Forward Characteristics

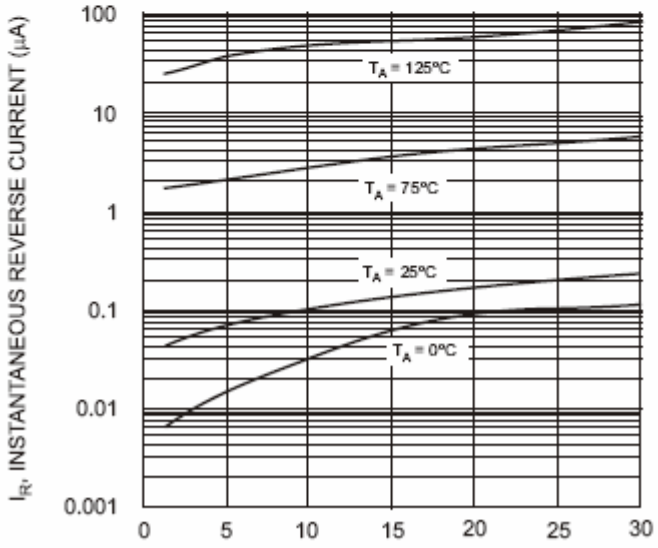


Fig. 3 Typical Reverse Characteristics

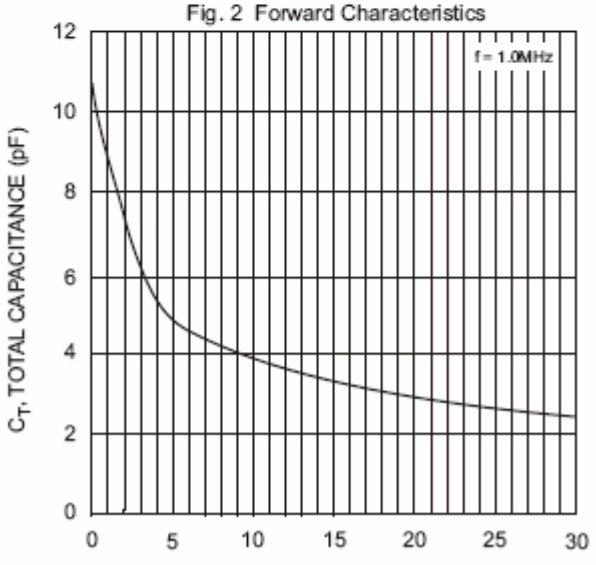


Fig. 4 Typical Capacitance vs. Reverse Voltage